

# MICHIGAN FARM NEWS



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## SoyDiesel Hits Flint Roads in City Busses

Two mass transit busses in Flint will be burning what many Michigan farmers will be planting this spring. Soy diesel, a blend of 20 percent bio-diesel made from soybean oil and 80 percent regular diesel, will be tested in two Flint busses for 50,000 miles.

During that time, emission and engine wear tests will be conducted, to determine if soydiesel is the answer for stricter mass transit emission standards, scheduled to go into effect in 1996. According to Hayward Seymore, director of maintenance for the Flint Mass Transit Authority, soydiesel has several benefits over other alternative fuel options.

"Soydiesel is definitely a cheaper alternative fuel in respect to retrofitting both the engines and the facilities," Hayward said during an April 28 ceremony in Flint. "It's very costly to retrofit these diesel engines to burn natural gas or liquid natural gas, plus we would have to install fire sensors in all of our maintenance buildings."

Thanks to the support of soybean producers across Michigan and the U.S., nearly 7 million miles have been logged in diesel engine tests burning soydiesel, according to Kenlon Johannes, executive director of the National Soydiesel Development Board. "That ranges from farm tractors, to a boat going around the world, to over 30 different mass transits in major cities trying soydiesel to see if it can fit into their plans to meet new emission standards."

Flint's mass transit authority was the only one out of 20 different Michigan municipalities approached by the National SoyDiesel Develop-



ment Board to implement the soydiesel program in their mass transit busses, according to Keith Reinholt, Michigan Soybean Promotion Committee executive director. He expects other municipalities to eventually follow Flint's lead.

"That's good news for Michigan farmers for two reasons," Reinholt said. "It will use more soybean oil, which there is an abundance of, and it puts a very positive light on agriculture's role in a cleaner environment."

Tests of soydiesel, which has no sulfur, shows that it reduces the emissions of smoke and soot, carbon monoxide and hydrocarbons in unmodified diesel engines.

Currently, using soydiesel in a fuel program means an additional cost of 30 to 40 cents per gallon for the fuel. Reinholt expects that once the market and demand start to grow, the cost of this alternative fuel will drop considerably.

## Understand Those New Fees on Your Fertilizer and Chemical Invoices?

In case you haven't noticed, there may be a new line item on your fertilizer and chemical invoices this spring. Like it or not, recent changes in federal pesticide registration requirements created the need for Michigan to develop a groundwater protection plan or face the cancellation of several pesticides which could pose a threat to groundwater quality.

Those pesticides included herbicides, such as atrazine, alachlor, bromacil, carofuran, cyanazine, metolachlo, metribuzin, and simazine,

according to Michigan Farm Bureau's Vicki Pontz. Cooperative efforts between the Michigan Farm Bureau, Michigan Department of Agriculture and the Michigan Agri-Business Association, resulted in successful passage of the "Groundwater and Freshwater Protection Act," in November of 1993.

"The Groundwater and Freshwater Protection Act was designed to provide the Michigan Department of Agriculture the ability to assist pesticide users in the development of an acceptable groundwater protection plan and to provide the resources necessary to promote education,

technical assistance and cost-share programs," Pontz explained. "The groundwater program will help the farm community develop a single set of 'Groundwater Stewardship Practices,' that will be practical, economical, and acceptable to the farm community."

Programs under the act will be funded by increases in pesticide and specialty fertilizer registration fees, as well as nitrogen fertilizer tonnage fees. For agricultural pesticides, the fee is

Continued on page 11, see **Groundwater Protection Act**

## Widespread Rains Put the Spring Rush on Hold

Despite a couple of good weeks in mid-April, most field work was halted the last week of April and first week of May, thanks to heavy rainfall throughout most of Michigan. As of May 9, Michigan Ag Statistics reported that 20 percent of the state's corn crop was planted, 80 percent of the sugar beets were planted, and potato planting was 25 percent complete. Fruit development was reported as normal, and asparagus harvest had started in southwest Michigan. The 90-day outlook predicts continued wet and cool, says MSU's Jeff Andresen (see page 4).

At right, Gordy Locke, of Pete Clark Farms, near Grand Ledge, was taking advantage of ideal soil conditions prior to the heavy rains, with an 8760 John Deere and a 32 foot Mulch Master outfitted with rolling tines, in preparation for corn planting. The farm operates 5,000 acres of corn, soybeans, and wheat.



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## In Brief...

### Japan May Finally Lift Ban on Imported Apples

Japan should decide soon whether to lift its ban on imported apples, according to agricultural officials in Tokyo. Japan has a team of pathologists in the United States investigating new U.S. repellents against a North American apple disease. They claim a disease known as fire blight is the main reason for keeping American apples out of Japan.

U.S. growers say the claim is frivolous and simply a ruse to protect Japanese apple growers from new competition. They say if there was a disease problem, it has already been corrected with various new pest control measures. According to Tom Butler, manager of Michigan Processing Apple Growers Division of MACMA, apple growers should keep the pressure on the U.S. Trade Representative's office to see the Japan ban lifted immediately.

"Japan could and should be the U.S. apple industry's number one export market," Butler said. "Japan's claim of insect and disease damage from U.S. apples are simply unfounded and, in effect, is nothing more than a trade barrier. Any additional foreign market channels will create less domestic market competition, and that would definitely be good news for Michigan apples producers."

For years, Japan has bowed to pressure from its farmers to keep imported apples from coming into the country. So far, only New Zealand has been able to win approval to sell apples to Japan. Japanese officials say the apple ban will probably not be lifted before October if the report of their inspection team is favorable. Japanese farmers have already staged a protest against the first shipment of New Zealand apples (110 pounds) to reach the country.

### Farm Exports Fell in February

U.S. agricultural exports totaled \$3.5 billion in February, down 9 percent from the same month in 1993, according to an Agriculture Department report. Foreign sales of wheat, coarse grains, soybeans and other products dropped 18 percent for the month to lead the decline. However, exports of consumer-oriented products hit \$1.1 billion, a 5 percent increase. That category included poultry products, prepared and preserved meats, pet foods, wine and beer, the report said.

### Administration Could Still Blow GATT Deal

Even though the new world trade agreement has been signed by member countries of the General Agreement on Tariffs and Trade (GATT), it still requires support from legislatures around the world, including the U.S. Congress. A letter to President Clinton, signed by all 17 members of the Senate Agriculture Committee, says that support could fail to materialize if the administration tries to cut farm program spending to offset revenue lost through elimination of import tariffs.

The American Farm Bureau has already warned the administration that agriculture's support would be lost if the decreased tariff revenues are paid for by cutting farm programs, which already have taken more than their share of cuts to reduce the deficit. Essentially the same warning now comes from the Senate Agriculture Committee, according to an *Associated Press* report.

In case the letter to President Clinton was too subtle, Senate Ag Committee Chairman Patrick Leahy (D-Vt.) gave a blunt interpretation. "Read that letter very carefully," Leahy said. "You can't afford to lose 17 votes." Another indication of congressional opposition to cuts in farm spending to make up the import tariff shortfall to comply with the GATT agreement came from Rep. Pat Roberts (R-Kan.).

He told reporters the Clinton administration plans to take \$5.6 billion of the \$14 billion in lost revenue out of the agriculture budget, according to *Knight-Ridder News*. "Agricultural imports will account for only \$700 million or 5 percent of the lost tariff revenue, but the administration wants farmers to cough up 40 percent of the cost," Roberts said.

### Shiflett Named Field Services Representative for Farm Bureau Insurance

Jim Shiflett has joined Farm Bureau Insurance as a senior field services representative in the Property-Casualty Underwriting area. His responsibilities include agricultural workers' compensation safety surveys as well as loss reduction activities for insured farms and agribusinesses. He will also be providing resources on agricultural safety issues for underwriting, agency training, and local community groups.

A 1976 graduate of Olivet College, Shiflett has worked for American States Insurance Company, Michigan Farm Bureau, Farm Bureau Insurance, and Michigan Millers Mutual Insurance Company.

Shiflett has achieved the Chartered Property Casualty Underwriter (CPCU) and Associate in Underwriting (AIU) designations from the Insurance Institute of America. He is a member of the Insurance Program Advisory Council at Olivet College and an adjunct faculty member there. He is also past president of the Central Michigan Underwriters Association and was named an Outstanding Young Man in America in 1987.



### USDA Trimming Staff with Buy-out

The Agriculture Department says 1,200 of its employees have arranged to resign under a buy-out incentive program. Another 2,164 USDA workers are said to have requested the buy-outs and are likely to leave the payroll next month, the USDA said.

The staff reduction fits in with Agriculture Secretary Mike Espy's effort to reduce employment by 7,500 by 1998 from its current level of 112,000. Most of the departures to date are from the Forest Service and Soil Conservation Service, according to the announcement. The buy-out plan offers up to \$25,000 to employees who agree to resign or retire early.

### 1993 Michigan Meat Animal Receipts Up 8 Percent

Cash receipts from 1993 marketings of meat animals in Michigan totaled \$517 million, up 8 percent from the previous year, according to the Federal/State Michigan Agricultural Statistics Service. Cash receipts from hog marketings were \$208.4 million, up 5 percent from 1992. Cattle and calf cash receipts, at \$304.5 million, were up 11 percent. Sheep and lamb marketings, at \$3.9 million, were slightly down from 1992.

Michigan cattle prices averaged \$61.60 per 100 pounds of live weight, an increase of \$2.30 from last year. Calf prices went up from \$88.10 per 100 pounds of live weight in 1992 to \$96 per 100 pounds of live weight in 1993. Cattle and calf marketings were up 29.1 million pounds from the previous year. Hog marketings in Michigan were down 20.9 million pounds with hog prices averaging \$43.90 per 100 pounds of live weight, up \$3.90 from 1992. Lamb prices increased to \$67.10 per 100 pounds of live weight, \$5.40 more than a year earlier.

Nationally, marketings of meat animals were up slightly with cattle and calves posting at higher levels. Total gross income increased to \$51.8 billion, up 6 percent from 1992. The gross income from sheep and lambs, and cattle and calves were both up 5 percent, while hogs and pigs were up 8 percent. Cash receipts were as follows: cattle and calves totaled \$39.9 billion compared with \$37.9 billion in 1992; hogs and pigs totaled \$10.9 billion, 8 percent above 1992; and sheep and lambs totaled \$489 million, compared to \$463 million in 1992.

### "Farm and Garden" TV Show Gets Better Time Slot

In recognition of its increasing popularity, WNEM-TV 5 in Flint/Saginaw/Bay City has given "Farm and Garden" a better time-slot by changing the air time for the show from Saturday at 7 a.m. to Saturday at 7:30 a.m. The show will continue to repeat on Sundays at 6:30 a.m.

"Farm and Garden" is produced by WNEM and MFB with support from the Saginaw, Gratiot, Huron, Midland, Bay, Sanilac, Genesee and Tuscola county Farm Bureaus. The show is hosted by Farm Bureau leaders Karen Stoneman and Dean Smith.

### A Popular Bill Against Unfunded Mandates

A Senate hearing on a series of bills that would prohibit passage of unfunded federal mandates brought out a flock of environmental lobbyists to testify against them. Many of the federal mandates for which Congress does not appropriate funds involve environmental rules. A bill, sponsored by Sen. Dirk Kempthorne (R-Idaho) would not allow legislation to be passed that imposed unfunded mandates on state and local governments, has 54 cosponsors in the Senate. A similar bill in the House has 220 cosponsors.

### USDA Canada Wheat Case Hit by ITC

Members of the International Trade Commission (ITC) have come down hard on the USDA for not providing enough concrete information to substantiate its case against Canadian wheat imports. One commissioner said the USDA task force report was nothing but political documents "with little evidence to substantiate a need for trade restrictions against Canada," according to a *Knight-Ridder* report. The commissioner, David Rohr, was referring to an internal USDA report prepared last fall, but not yet released by the department, and a pre-hearing brief filed by the department.

The ITC is composed of six commissioners, each of whom will have one vote in deciding whether the facts warrant the U.S. imposing a quota or fee on imports of Canadian wheat. The USDA spokesman told the panel the agency recommends imposition of an import quota on Canadian wheat, but has not yet decided what amount of imported wheat should be allowed before the quota is triggered. That decision will be made after the ITC investigation is completed.

Under the tariff-rate quota, a certain quantity of Canadian wheat would be allowed into the U.S. with no tariff or at a very low rate, but imports above that level would be discouraged by a very high tariff rate.

The ongoing ITC investigation is independent from the action taken by USDA earlier this week to give Canada 90 days to reach a negotiated settlement or face import restrictions under GATT rules. Currently, the United States is expected to import about 95 million bushels of wheat from Canada in the marketing year, which ends May 31. That is a sharply higher level of wheat imports from Canada than the minimal amounts purchased just a few years ago.

### New Waste Treatment May Help Hog Producers

Legal objections and other opposition to large-scale hog operations in Iowa, Missouri and other states may be resolved by a new waste treatment device Iowa State University Professor Richard Dague says he has patented. The process uses an "anaerobic sequencing batch reactor" containing common sewage bacteria that thrive in a sealed, airless environment. No air means no odors, Dague says.

The bacteria convert swine waste into a biogas rich in methane and reduce the solid mass so there is less waste to affect ground and surface waters. Dague said his device is so new that most livestock waste engineers don't even know about it, but he thinks its simplicity will attract their attention soon.

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Editorial: Dennis Rudat, Editor and Business Manager. Staff Contributors: Mike Rogers; Connie Lawson; Donna Wilber; Henry Huisjen.

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**Farm Bureau Seeks Substitute to Clean Water Act**

**MFB POSITION**  
Farm Bureau has been extensively involved in developing the substitute package and supports its enactment.

**MFB CONTACT**  
Al Almy, Ext. 2040

The Clean Water Act is up for reauthorization by Congress this year. H.R. 3948, currently pending in the House Public Works and Transportation Committee, would not only reauthorize the Act but make significant changes as well.

The bill is extremely harsh and punitive and, if enacted as introduced, would affect every farmer. It gives no recognition to the progress farmers have made to date in using good soil conservation practices. The EPA through state agencies would set terms and conditions for farm plans and have primary enforcement authority.

A bipartisan group of congressmen on the Public Works and Transportation Committee have developed a substitute package of amendments to replace H.R. 3948. The substitute package is supported by a broad based group of interests including agriculture, business, state water agencies, the National Governors' Association, Conference of Mayors, and the National League of Cities.

The substitute eliminates many of the harsh and punitive provisions of H.R. 3948 and establishes a workable approach to non-point source and wetlands policy. Among the key provisions of the substitute are:

- A national goal incorporating the cost/benefit concept;
- Deletion of all references to groundwater in the national goal;

- Restores the historical lead role of the states in the Clean Water Act;
- A state run nonpoint source program with complete state flexibility for design and implementation of voluntary or enforceable programs. There are no EPA established mandates, timelines and BMP's in this proposal.
- Risk assessment provisions;
- Property rights provisions;
- Wetlands reform provisions;
- Deletion of expanded citizen suit authority and bounty hunter provisions;
- Index current penalties to inflation; and
- Protection against unfunded mandates.

**House and Senate Differ on USDA Reform**

The Senate has now passed its version of the USDA reorganization bill, and a different version has cleared the House Subcommittee on Departmental Operations. The House bill still must be heard in the Agriculture Committee before it goes to the House floor.

At this point, neither bill conforms to a Farm Bureau policy favoring addition of the Soil Conservation Service to the new Farm Service Agency, says Rob Nooter, director of government relations for AFBF.

Farm Bureau believes oversight of commodity programs and natural resource activities of

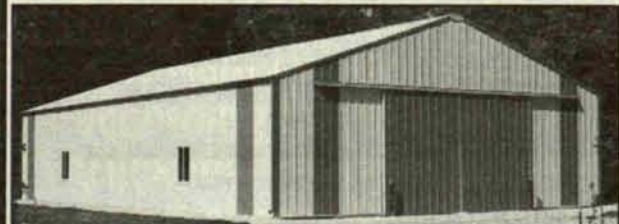
the department should be carried out by local, county or area committees of elected farmers. Soil Conservation Service should not become a regulatory agency, but should concentrate on providing quality technical assistance, education and scientific expertise on natural resources to farmers and other constituents. The funding for conservation programs should be administered by ASCS or its successor, Nooter said.

"It's our opinion that a Farm Service Agency be established to incorporate ASCS, FmHA agricultural lending programs, federal crop insurance and SCS," Nooter said.

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**Farmland Definition, H.B. 5329 - Immediate Effect Sought**

**MFB POSITION**  
MFB supports the six-mill farmland definition, but continues to seek immediate implementation in both the House and Senate.

**MFB CONTACT:**  
Ron Nelson, Ext. 2043

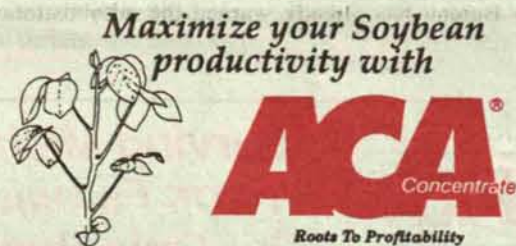
**Status Report:**  
On Thurs., May 5, the Senate considered H.B. 5329. Several unfavorable amendments were defeated. The bill is awaiting final passage in the Senate before being returned to the House for concurrence.

The House version, sponsored by Reps. Dan Gustafson (R-Haslett) and Kirk Profit (D-Ypsilanti) has moved through the House after very lengthy debate on April 22 with several amendments. Most of the amendments were friendly to agriculture and acceptable to Farm Bureau. However, the bill as it passed the House did not receive immediate effect.

The bill was reported out of the Senate Agriculture Committee and was debated in the Senate during the first week of May. The Senate committee stripped two of the House amendments from the bill. One of the amendments removed stated that if marijuana were cultivated on a farm, that land would not qualify for the 6 mills. The second amendment that was removed dealt with corporate agriculture and stated that if the corporation had a single business tax liability of greater than \$20,000 the land owned by the corporation would not qualify for the 6 mills.

A two-thirds majority vote is required for immediate effect. Following the debate in the Senate, the bill has to be returned to the House to concur with the Senate amendments and to give immediate effect.

The bill in its most recent version, after Senate amendments, provides that all farmland classified agriculture for tax purposes will be taxed at 6 mills or, if classified otherwise, 51 percent of the land must be used for agricultural purposes as defined in P.A. 116. In addition, land and forest, which has a Forest Management Plan in place similar to the Commercial Forest Act, would also qualify for the 6 mills.



**Identifiable Performance Parameters on Soybeans**

The following are frequently observed plant responses from soil and foliar applications of ACA on soybeans.

Visual Response	Observation Timing (Stage of Growth)
<ul style="list-style-type: none"> <li>• Vigorous early plant growth</li> <li>• More fibrous and extensive root system</li> </ul>	<ul style="list-style-type: none"> <li>• VE to V3 (Emergence to third trifoliate stage)</li> <li>• Early - V1 to V5</li> <li>• Late - R2 (full bloom)</li> </ul>
<ul style="list-style-type: none"> <li>• Fuller Canopy</li> </ul>	<ul style="list-style-type: none"> <li>• Beginning at V5 and on (ACA treated plants often fill the row sooner)</li> <li>• R2 (full bloom)</li> <li>• R8 (full maturity)</li> </ul>
<ul style="list-style-type: none"> <li>• Larger diameter stem</li> <li>• Heavier seed weight</li> </ul>	

The identified performance parameters typically result in:

- Increased uptake of soil nutrients
- Increased uptake of soil moisture
- Increased utilization of sunlight in photosynthesis
- Improved standability and ease of harvest
- Higher yields

**Yield Information Postemergence applications to Soybeans (1993)**

- 13 total studies
- 4.5 bushel per acre increase
- 10.4% increase in yield
- Return on ACA investment of \$23.56 (1/2 pint/acre) or \$21.84 (2/3 pint/acre)
- 1/2 pint ACA per acre in-furrow [Soybeans at \$6.00/bushel x 4.5 bushel increase/acre = \$27.00 - ACA investment of \$3.44/acre (1/2 pint/acre) = \$23.56 R.O.I./acre]
- 2/3 pint ACA per acre broadcast [Soybeans at \$6.00/bushel x 4.5 bushel increase = \$27.00 - ACA investment of \$5.16/acre (2/3 pint/acre) = \$21.84 R.O.I./acre]

**Application Techniques/Procedures**  
Test results have shown that ACA can be applied to the soil or foliage of soybeans. ACA can be injected in-furrow as a pure product or broadcast incorporated into the soil. The broadcast soil application can be in water, with a fertilizer solution, and/or with a soil applied herbicide. The incorporation or movement of ACA into the soil profile can be by tillage, rainfall, or irrigation. This will position the ACA near the developing root system of the plant.

Foliar applications should be made when the soybean plants are in the second (V2) to third (V3) trifoliate stage of development. This coincides to when most postemergence soybean herbicides are applied. It is presently not recommended that ACA be applied with any postemergence herbicide or insecticide until further testing has been completed.

**Methods of Application**  
ACA mixes easily with and fits into the following fertilizer programs:

**Soil Applications**

- Soil broadcast applied with liquid fertilizers
- Soil broadcast applied with dry blended fertilizers
- Soil broadcast applied (weed & feed herbicide/fertilizer solution or dry)

**Foliar Applications**

- Application can be made with liquid fertilizers as the carrier

**Other application methods:**

- Soil applied broadcast with water as the carrier, with or without a herbicide
- To soybean foliage with water as the carrier
- Direct injection of undiluted ACA in-furrow



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# Weather

## 30-Day Forecast – Warmer and Wetter Than Normal; 90-Day Forecast – Cool and Wet

Average temperatures during April ranged from near normal in the north to above normal in the south. These values are somewhat misleading, however, as day to day conditions were highly variable, ranging from sunny and warm to cold and windy. These patterns reflect the temporal, quickly changing nature of the winds aloft every several days during the month.

The monthly precipitation totals reflect the periodic intrusion of Gulf of Mexico moisture into the state, with near normal totals in the north and almost 200 percent of normal in the far south. Several periods of rain and snow near the end of the month ended what had been an extremely favorable month for field work.

New outlooks for Michigan indicate a general southwesterly flow pattern during the coming weeks, with the new National Weather Service (NWS) 30-day outlook for May calling for warmer and wetter than normal conditions.

Further ahead, the new NWS 90-day outlook for May through July calls for somewhat of a reversal, with troughing in the jet stream over the northern Great Plains and Upper Midwest resulting in cooler and possibly wetter than normal weather for the

4/1/94 to 4/30/94	Temperature		Growing Degree Days		Precipitation	
	Observed Mean	Dev. From Normal	Actual Accum.	Normal Accum.	Actual (Inch.)	Normal (Inch.)
Alpena	43.4	+ 3.0	87	60	2.56	2.52
Bad Axe	45.6	+ 1.5	102	97	3.63	2.55
Detroit	51.4	+ 4.0	175	111	3.82	3.21
Escanaba	38.4	- 0.6	10	24	2.12	2.43
Flint	48.2	+ 2.2	132	111	5.01	3.21
Grand Rapids	48.8	+ 2.7	143	124	3.06	3.41
Houghton	37.6	+ 0.2	29	55	1.91	2.28
Houghton Lake	44.1	+ 1.2	82	60	2.44	2.52
Jackson	48.8	+ 1.5	148	122	2.69	3.19
Lansing	48.2	+ 2.3	140	122	3.61	3.19
Marquette	37.7	+ 0.8	43	55	2.08	2.28
Muskegon	45.4	+ 0.1	76	90	2.33	3.16
Pellston	40.5	+ 0.7	52	68	2.89	2.69
Saginaw	47.4	+ 1.9	112	97	5.33	2.55
Sault Ste. Marie	36.8	- 1.2	16	24	2.33	2.43
South Bend	51.5	+ 2.5	187	124	2.26	3.41
Traverse City	43.4	+ 1.2	65	68	3.02	2.69
Vestaburg	45.7	0.0	118	101	3.73	3.07

*Observed and growing degree day totals are accumulated from March 1. Normals are based on district averages. Jeff Andresen, Ag Meteorologist, MSU*

first half of the growing season over Michigan and much of the entire Corn Belt Region. While the cooler and wetter than normal weather scenario is strongly correlated with high yields of summer crops over much of the Corn Belt (these correlations will certainly be less following the extreme conditions of the summer 1993), this type of weather scenario may lead to maturity problems for some full-season or heat-loving crops here within Michigan (as was the case in 1992).

### Michigan and Major Commodity Area Extended Weather Outlook

T - Temp.	5/15..... 5/31	5/15.....7/31
P - Precip.	T.....P	T.....P
Michigan	A.....A	B.....A
W. Corn Belt	A.....A	N.....A
E. Corn Belt	A.....A	N.....A/N
Wint. Wheat Belt	N.....A/N	B/N.....A/N
Spr. Wheat Belt	N.....A	B.....N
Pac. NW Wheat	B.....N	N.....N
Delta	A.....N	N/A.....N
Southeast	A.....N	A.....N
San Joaquin	B.....N	A.....N

A-Above Average, B-Below Average, N-Normal, MA-Much Above, MB-Much Below, NP-No Precip. Source: National Weather Office

## Wet Weather a Concern for Nitrogen Losses?

With the recent wet spell across most of Michigan, many farmers may be wondering if their spring applied anhydrous is staying put. You are probably experiencing major losses unless you used a nitrification inhibitor with your application, according to Northrup King Michigan agronomist Dan Coffin.

Coffin explains that nitrogen applied to the soils must pass through the nitrogen cycle, meaning it must either be used by plants to grow dry matter, utilized by bacteria or it may be leached out of the topsoil with the movement of water.

Nitrification is the process whereby soil bacteria convert the ammonia to ammonium and then to nitrite, and then to nitrate. Denitrification is the process occurring now as soils begin to warm and are saturated, said Coffin. Under conditions with no oxygen, certain bacteria are using nitrate to obtain the oxygen they need to survive.

That results in nitrogen being converted to gas which is lost to the atmosphere.

Nitrification inhibitors are simply bactericides that limit the population of bacteria causing this process. In time, the population returns to normal, allowing the conversion process to return to normal.

## Confusion of Rules on Genetically Altered Foods

The food industry is calling for an end to confusion between state and federal rules concerning labeling of genetically altered foods, according to a release from the Grocery Manufacturers of America.

They're are calling for Food and Drug Administration Commissioner Dr. David Kessler to immediately stem the tide of state proposals that undermine FDA's leadership on labeling.

"We urgently request that FDA take immediate steps to encourage states to follow the federal approach on biotechnology, including labeling issues. Every responsible independent health organization has agreed that milk from

cows treated with supplemental BST is safe. (The food industry groups) agree that milk from BST-treated cows is the same in every way as milk from untreated cows -- including safety, composition, taste and nutrition. No additional labeling is necessary," said Dr. Steve Ziller, GMA's vice president of science and technology.

Ziller pointed out the futility of manufacturers trying to comply with the emerging "patchwork quilt" of state laws that conflict with each other and the FDA. "This is a complex area, requiring the uniformity of approach that only federal oversight can provide," Ziller said.



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Since its beginning in 1971, Michigan Farm Radio Network's only objective has been to serve Michigan's farm families. This dedication to serve agriculture is shared by 29 local radio stations in Michigan. Through these stations, Michigan Farm Radio Network provides the latest in market analysis, weather and news to Farm Bureau members daily on the following stations:

Station	City	Frequency	Morning Farm	Noon Farm
WABJ	Adrian	1490	5:45 am	11:50 am
WATZ	Alpena	1450	5:30 am	11:30 am
WTKA	Ann Arbor	1050	6:05 am	12:05 pm
WLEW	Bad Axe	1340	6:30 am	12:50 pm
WHFB	Benton Harbor			12:30 pm
WKYO	Caro	1360	6:15 am	12:15 pm
WKJF	Cadillac	1370	5:55 am	11:20 am
WTVB	Coldwater	1590	5:45 am	12:20 pm
WDOW	Dowagiac	1440	6:05 am	12:15 pm
WGHN	Grand Haven	1370/92.1	5:45 am	12:15 pm
WPLB	Greenville	1380	6:15 am	11:45am
WBCH	Hastings	1220	6:15 am	12:30 pm
WCSR	Hillsdale	1340	6:45 am	12:45 pm
WHTC	Holland	1450		12:15 pm
WKZO	Kalamazoo	590	5:15 am	
WLSP	Lapeer	1530	7:20 am	11:50 am
WOAP	Owosso	1080	6:15 am	12:30 pm
WHAK	Rogers City	960		12:15 pm
WSJ	St. Johns	1580	6:15 am	12:15 pm
WMLM	St. Louis	1540	6:05 am	12:20 pm
WSGW	Saginaw	790	5:55 am	12:20 pm
WMIC	Sandusky	660	6:15 am	12:45 pm
WCSY	South Haven	940		12:15 pm
WKJC	Tawas City	104.7		12:45 pm
WLKM	Three Rivers	1510/95.9	6:15 am	12:15 pm
WTCM	Traverse City	580	5:55 am	11:20 am

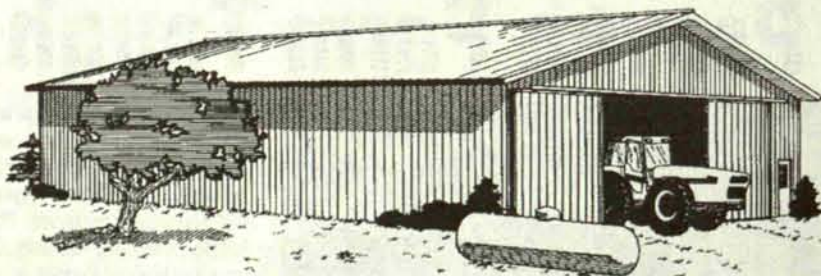
\* Station signs on at different times during the year. Morning farm times change with the sign-on times.

\*\* Station airs various farm reports between 5:30 and 6:00 a.m.

\*\*\* Station airs various farm reports between 12:00 and 1:00 p.m.

Some stations carry additional market reports throughout the market day.

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## Market Outlook...

### CORN

As of the first of May, the markets had made a small but significant turn-around from the downtrend we have seen over the past several months. The pricing decisions over the next two months will be critical for those with much old or new crop still unpriced. One needs to set some pricing goals based on the July and December corn futures contracts. You also need to determine how much you will price each time you reach the goals.

Based on the fundamentals and the risk left in the growing season, there are pretty good odds that July corn futures will trade over \$2.80, but there are not very high odds of it trading over \$3. For the December new crop futures, there are pretty good odds it will trade over \$2.65, but not very high odds it will trade over \$3. These are some ranges you could base your pricing decisions on. Remember to price into an up market.

Old crop basis is tight, but the market says it will pay 4 cents to hold it from May until July. I think it is time to have most unpriced

### WHEAT

The first of the year's USDA survey based Crop Production Report was released May 10. Check it out -- we will discuss it in the next issue. If it was bullish, it is probably a good time to price some of your 1994 wheat crop.

It will not be long before the size of the U.S. winter wheat crop is reasonably clear, so we must take advantage of pricing opportunities now. Or we may be holding our wheat for a December rally, which means some significant storage costs.

### SOYBEANS

The soybean market has made a little comeback like corn. The questions are the same: what are the odds of a rally and how much should we price at various levels? The odds are there will be some significant rallies over the next two months. However, it will be tempered by the large South American supplies, high U.S. planted acres and demand questions.

There are good odds that July soybeans futures will trade over \$6.85 several times over the next two months. There are not very good odds that they will trade over the previous high of \$7.50 in that same period.

Seasonal Commodity Price Trends	
Wheat	→ ↑
Corn	→ ↑
Soybeans	→ ↑
Hogs	↑
Cattle	→ ↓

Index: ↑ = Higher Prices; ↓ = Lower Prices; TP= Topping; BT= Bottoming; ? = Unsure

old crop corn (and all off-farm) on paper rather than in the bin. You can do this with a basis contract or an MPC. The new crop basis being offered is in the normal range, but on the wide side. As you price new crop on rallies, consider an H-T-A versus a forward contract if they are offering a weak basis.

It appears 1993-94 exports will reach expectations, so 1993-94 use is pretty much known. The 1994-95 use figure still has a lot of unknowns. The former USSR region will probably have a smaller crop, but will they have any money to pay for it?

The market has factored in some fairly high feed use this summer, but it will not take much of a wheat rally to knock that down. These questions will all be trading in the market along with the weather news. Set goals and be ready to move.

New crop November soybean futures will likely trade over \$6.40 at some point this summer, but aren't likely to trade over \$7.00. Set pricing goals using these ranges as a base and how much you will price each time the futures reaches your next goal.

Old crop soybean basis is tight. As I have been saying for a while, don't be storing beans. Use a basis contract, a call option, or a minimum price contract to stay in the market. On the other hand, new crop basis being offered are weak. Consider using a hedge, hedge to arrive, or put-options to lock in new crop pricing goals.

Dr. Jim Hilker, Dept. of Agricultural Economics, MSU

### CATTLE

It is pretty clear there's a lot of meat around, and while demand seems fairly strong, supply numbers seem to be overwhelming the situation. Beef production in March was huge, up 8 percent from the previous year. Slaughter numbers and weights in April indicate production will be up significantly. The Cold Storage Report shows beef stocks are up. And all of that is before we discuss the Cattle-On-Feed Reports.

Both the quarterly 13-State and the monthly 7-State Cattle-On-Feed Reports showed 2 percent more cattle in feedlots on April 1, 1994, than we had a year ago. We placed the same number in both the first quarter and in March as last year. Marketings for the January-March period were up

### HOGS

Where are all the hogs coming from? The latest Hogs and Pigs Report indicated that production would be down about 4 percent at this time and we have been running even to higher than expected.

While things can change quickly, the higher than expected recent production has still put a lot of pressure on the future

### DAIRY OUTLOOK

Dr. Larry G. Hamm, Dept. of Agricultural Economics, MSU

The dairy product markets have broken out of their winter pattern and are moving like a spring storm. Both cheese and butter markets have weakened recently, meaning that farm pay prices will start to fall by June.

After holding steady for a month, cheddar cheese prices on the National Cheese Exchange (NCE) fell the last two weeks in April. The price of 40-pound blocks peaked at \$1.3975 per pound on April 15. After a \$.005 drop on April 22, the price dropped \$.04 on April 29. The combined drop of \$.045 translates roughly into a \$.45 per cwt. drop in the farm pay price later this spring. On April 29, the wholesale butter price on the Chicago Mercantile Exchange also dropped by \$.01 per pound.

Cheese prices had to move because of the difference between the cheese futures market and the cash market on the NCE. On April 21, the futures market cheese price for May was \$1.3425, while the cash price, as

# FARM BUSINESS OUTLOOK

4 percent in the 13-state report, but were even in the 7-state report.

This report indicates to me that we will continue to have more cattle coming to market than a year ago through June and then taper off to about even numbers as we go through the summer. This would mean prices will stay much weaker than a year ago through June, and then be near to slightly above last year through the summer and fall.

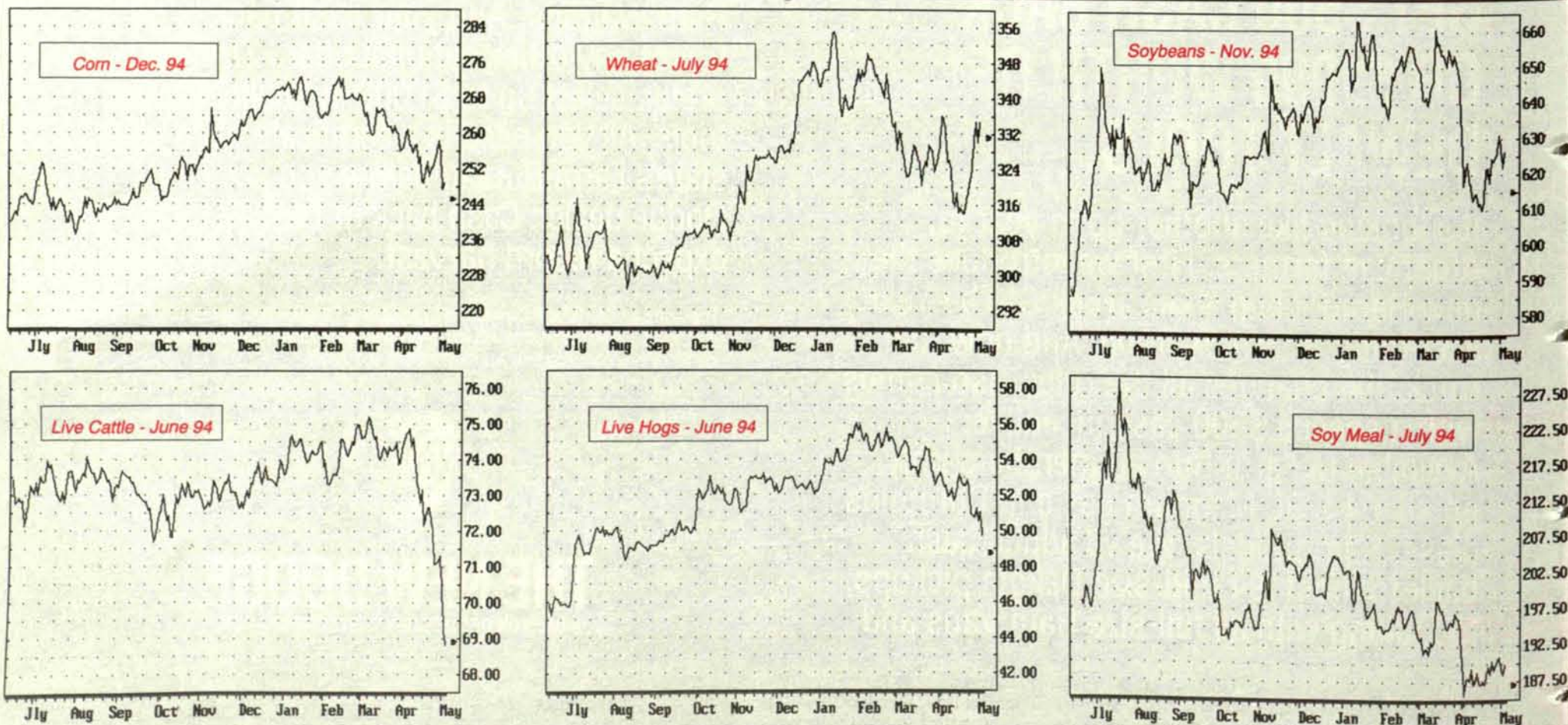
markets out through the summer. But despite this, the market should make the typical seasonal price increase soon.

The problem is that we are now starting from a lower level than we thought we would be at. I wouldn't hold back ready hogs to try and get the seasonal increase, but I wouldn't be sending them early either.

measured by the NCE, was \$1.3975. As futures contracts expire, the cash and futures prices have to move toward each other until they are the same.

On Friday, April 22, the futures price went up \$.009 per pound, while the NCE price went down \$.005. There was hope that the futures market would continue to move up faster than the cash price went down because producers' farm pay prices are directly related to the NCE price. Unfortunately, on April 29, the cash price on the NCE crashed to meet the futures price rather than the other way around.

Reports are that, although milk supplies are constrained in Wisconsin and Minnesota, milk supplies in the South and West have been more than abundant. Farm milk is reported to be moving north to find processing plants. California's processing capacity is said to be constrained. With the spring-time supply recovery starting in the upper Midwest, it appears that the Minnesota-Wisconsin (M-W) price has nowhere to go but down.



Charts Provided by Knight-Ridder Financial



# 7 Custom Work Rates in Michigan

By Gerald D. Schwab and Marcelo E. Siles, Department of Agricultural Economics, Michigan State University

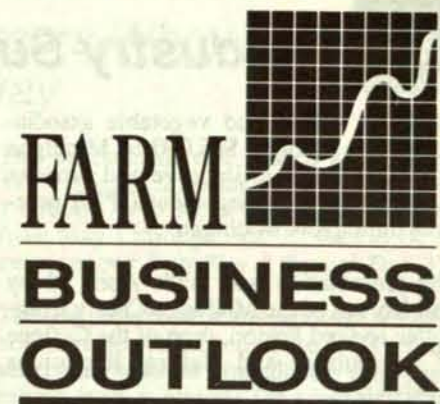
Provision and utilization of custom work services often elicits the question "What is a fair charge?" or "How much should I pay?" Some assistance in answering these questions is presented below. As stated in the mail survey questionnaire used to gather these data in Fall 1992, all charges except

where noted should include machine, tractor for pull-type machine, and machine operator or usual crew.

In the tables below, cost data are presented for labor, tractor rental, tillage, planting, pest control, harvesting, and for miscellaneous services. Each line item contains a brief descriptive identifier, the number of responses for that item, and the average cost in Michigan. A publication that provides this cost data for each of the nine crop

reporting districts in Michigan has been distributed to each county Extension office.

The data presented are actual cost data reported and are not necessarily recommended rates. Actual rates reported may not always be reflective to the total cost of the service. This situation can occur because the service is being provided by someone who has excess machinery capacity and views custom work as supplemental to his/her own farm income.



**Table 1. Labor Wages and Perquisites**

	No.	Michigan Avg.
Part-Time (\$/Hr.)	492	5.35
Milking	86	7.10
Chainsaw	24	12.90
Full-Time (\$/Mo.)	255	1431
Percent Providing:		
Housing	47.45%	
Meat	47.45%	
Milk	34.51%	
Medical Insurance	50.20%	
Life Insurance	11.76%	
Work. Comp.	100.00%	
Unemployment Insurance	22.35%	
Transportation	20.39%	
Retirement	14.51%	

**Table 2. Planting Custom Rates**

	No.	Michigan Avg. \$/Acre
Conventional Plant w/o Fertilizer	73	10.00
Conventional Plant w/Fertilizer & Insurance	134	12.35
No-Till Planter	163	16.35
No-Till Drill	166	13.05
Conventional Drill	109	9.05
Sugar Beet	17	15.10

**Table 7. Miscellaneous Custom Work**

	No.	Michigan Avg. \$/Ac.
<b>Custom Farming:</b>		
Corn	94	98.90
Soybeans	56	76.50
Sm. Grain	60	58.50
Forage	36	86.05
<b>Fertilizer:</b>		
Spreader	106	2.70
Dry Bulk	157	4.00
Liquid Equ.	31	3.40
Knife-In	30	7.30
Spray Equ.	50	3.35
App. Spray	126	4.60
NH3 Equip.	57	4.45
App. NH3	57	7.40
<b>Misc. Harvest:</b>		
Stalk Chop	34	7.60
Mow Weeds	26	18.00
Sugar Beet	36	54.60
<b>Cherries:</b>		
Tart	22	.07 \$/Lb.
Sweet	11	.09 \$/Lb.
<b>Manure:</b>		
Scrape	33	18.10 \$/Hr.
Load Slds.	43	19.60
Spread Sld.	38	25.30
Rent Pump	18	32.20
<b>Misc.:</b>		
Accounting	121	1121. \$/Yr.
<b>Excavating</b>		
Backhoe	160	41.40 \$/Hr.
Bulldozer	150	58.25
Dragline	19	73.40
Forklift	10	17.35
Snow Plow	62	31.30
<b>Stone Pick:</b>		
Hand	24	5.15 \$/Hr.
Machine	20	26.60
Post Holes	27	2.25
Dry Corn	66	.023/pt.
+ % Shrink	30	1.24
Sheep Shear	16	2.05/hd.
<b>Feed:</b>		
Grind Only	30	8.70 \$/T
Grind & Mix	38	10.55
G, M & Haul	26	12.55
<b>Tilling:</b>		
Trench	44	.353 \$/Ft.
Pull-In	36	.227
<b>Trucking:</b>		
Grain	168	.153 \$/Bu.
Miles	136	56
Livestock	88	.952/cwt.
Miles	75	70

**Table 3. Harvesting Custom Rates**

	No.	Michigan Avg. \$/Acre
<b>Combining:</b>		
Corn	394	21.85
Drybean	48	22.35
Soybean	250	21.00
Grain	353	19.55
Legume Seed	16	22.00
Ear Corn	59	19.00
<b>Chopping:</b>		
PT-Corn	62	32.45
SP-Corn	24	38.10
PT-Haylage	51	26.90
SP-Haylage	12	30.95
<b>Haying:</b>		
Mow	67	8.70
Rake	80	4.75
PT Mow-Condition	92	8.85
SP Mow-Condition	31	8.70
Bale Hay (\$/52 lb.)	139	0.371
Bale Straw (\$/43 lb.)	125	0.355
Load & Stack/bale	54	0.444
Big Bale (\$/965 lb.)	194	5.80
Big Straw (\$/815 lb.)	70	5.60
Haul Big Bale	36	2.90

**Table 4. Tillage Custom Rates**

	No.	Michigan Avg. \$/Acre
Moldboard Plow	197	13.10
Chisel	161	10.70
Mulch-Till	78	11.60
Discing	117	9.20
Field Cultivator	113	7.55
Cultimulch	67	7.10

**Table 5. Tractor Rental Rates**

	No.	Michigan Avg. \$/Hr.
Less than 100 HP (85 HP average)	99	\$20.90/hr.
More than 100 HP (160 HP average)	110	\$30.10/hr.

**Table 6. Pest Control Custom Rates**

	No.	Michigan Avg. \$/Acre
Cultivate	70	5.80
Rotary Hoe	50	4.20
Spray from Ground	184	4.80
Spray from Air	55	6.90
Scouting	48	5.70

## Market Outlook...continued from page 6

### EGGS

Dr. Henry Larzelere, Dept. of Agricultural Economics, MSU

Egg prices at the end of April were about 10 cents a dozen below a year earlier. Feed ingredient prices were 2-1/2 cents per dozen eggs above last year.

Wholesale prices in New York for Grade A large eggs in cartons averaged about 65 cents a dozen in April. May and June prices are expected to average in the low 60s. July,

August and September prices will probably average in the upper 60s. September prices will likely be about 70 cents a dozen, the first month in a long while that prices will be above year earlier levels.

The total flock size and total and table egg production on the first of April were all about 3 percent above April 1993. Signs of future moderation in production are continuing to be indicated by the March egg-type chick hatch down about 20 percent from March of 1993. The number of layer-type eggs in incubators in April were down 7 percent from last year.

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## Industry Supports Integrated Pest Management

Michigan's fruit and vegetable associations have pledged \$66,000 to Michigan State University to improve and broaden integrated pest management (IPM) practices throughout Michigan.

The presentation was made April 11 by Phil Korson of the Michigan Cherry Committee to Fred Poston, dean of the College of Agriculture and Natural Resources (CANR).

The money will be used to bolster IPM research that will reduce pesticide use in fruit and vegetable production. MSU will soon hire an IPM coordinator and a fruit and vegetable IPM program associate to direct and coordinate research and education.

The funding was provided through the Michigan IPM Alliance, which will continue to make cash contributions to MSU IPM activities for the next three years, possibly longer, depending on membership contributions.

Alliance members are the Michigan Department of Agriculture, the Michigan



Cherry Committee, the Michigan Potato Industry Commission, the Michigan Apple Committee, Gerber Products Company, the Michigan Blueberry Growers Association, the Michigan Asparagus Advisory Board, the National Grape Cooperative, the Potato Growers of Michigan, Com-

stock Michigan Fruit Cannery, the Michigan Vegetable Council, the Michigan Onion Committee, the Michigan Plum Advisory Board, the Michigan Carrot Growers, the Michigan Pickle Growers, the Michigan Celery Promotion Cooperative and the Michigan Pear Research Committee.

### Latest EPA Pesticide Regulation Efforts Labeled Misguided

The most recent attempt by the Environmental Protection Agency to reform pesticide laws in order to protect the nation's food supply is the wrong approach, according to a food industry coalition of which the American Farm Bureau is a member.

The administration bill would eliminate the outdated Delaney Clause, which bans the use of any known cancer-causing substance that can leave residue, no matter how insignificant, on food. However, the bill's restrictions on pesticide use and disregard for any risk/benefit consideration are unacceptable.

The EPA-proposed legislation is in direct conflict with H.R. 1627 and S. 1478, the Food Quality Protection Act, which has the support of Farm Bureau and most other food industry groups.

H.R. 1627 has 220 cosponsors in the House and 20 senators have signed on to S. 1478, making the Food Quality Protection Act the most appropriate pesticide reform law to assure continued safe food production.

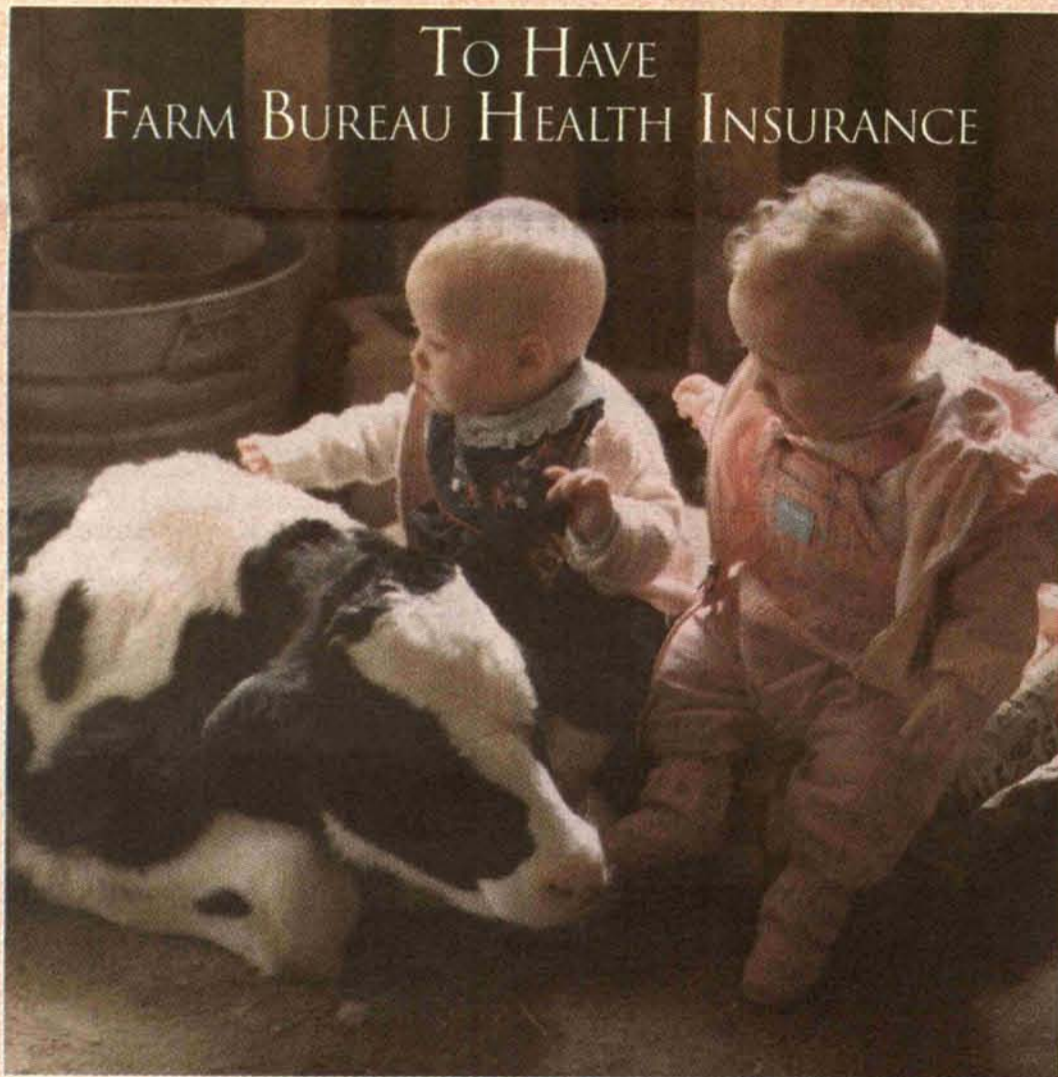
The EPA's proposed legislation ignores risk/benefit considerations, establishes an arbitrary and overly restrictive risk standard, sets an unworkable dual tolerance system and would prevent the use of state-of-the-art science.

It also includes excessive penalty provisions and allows citizen lawsuits against EPA, a pesticide registrant or any pesticide user, except farmers, for any alleged violation of FIFRA or any EPA pesticide regulation.

Farm Bureau considers this EPA bill excessively prescriptive and against the best interests of farmers and ranchers, says Mark Maslyn, director of governmental relations for the AFBF. In a letter to members of the House of Representatives, the Food Chain Coalition stressed its commitment to passage of responsible pesticide reform legislation, but this EPA-sponsored effort is not the proper approach.

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MICHIGAN FARM BUREAU

### Calendar of Events

**May 28 & 29,** Michigan Horse Drawn Vehicle Association Clinic and Show, Barry County Fairground in Marshall; contact Bernadine Karns (616) 781-5515.

**June 1-2,** Michigan Conference on the Horse Industry, MSU Kellogg Center; call Kevin Kirk at (517)323-7000, ext., 2024.

**June 20-24,** Young People's Citizenship Seminar, Calvin College, Grand Rapids, 1-800-292-2680, ext. 3234.

**June 22-24,** College Week, Michigan State University.

**June 29,** MSU Weed Day, Botany and Plant Pathology Farm, East Lansing; call Jim Kells, (517) 355-2173.

**July 19-21,** MSU-AG Expo, Michigan State University.

**July 20,** Summerfest, MFB Center, Lansing; call Kevin Kirk, 1-800-292-2680, ext. 2024.

**July 23,** Forage Field Day, Lake City Agriculture Experiment Station.

**July 26,** Plant Problem Diagnosis Field Day, Michigan State University; call Jim Kells, (517) 355-2173.

**July 27,** MSU Muck Research Farm Field Day, Laingsburg, 1 p.m.; call Darryl Warnke, (517) 355-0210.

**July 29-31,** ASA Soybean Expo 94, Kansas City, Mo.; contact the American Society of Agronomy office, 1-800-688-7692.

Mail or FAX information (include contact name and phone number) three weeks in advance to:

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## Dairy Self-Help Debate Continues in House Ag Subcommittee

Discussions to restructure the dairy price support program are continuing within the livestock subcommittee of the House Agriculture Committee. With the strong encouragement of subcommittee Chairman Harold Volkmer (D-Mo.), members of the committee are seeking a consensus that until now has eluded the dairy industry.

The continuing erosion of federal financial support for the dairy program and the severe price fluctuations resulting from small amounts of surplus production have many producers and lawmakers calling for an overhaul of the current program.

Various proposals for industry "self-help" are being discussed. Most of the proposals would create a USDA-sanctioned industry board, responsible for disposing of surplus production primarily in export markets. The export program would be funded by creating a Class IV marketing pool or with producer assessments.

### Researcher Named to MSU Meadows Endowed Dairy Chair

After a one and one-half year national search, the Clinton E. Meadows Endowed Chair for Dairy Cattle Management has been filled.

David K. Beede, professor of dairy nutrition and management in the Dairy Science Department at the University of Florida, will take over the position in September.

Beede's areas of expertise include nutritional management of dairy herds in warm climates, environmental management and modifications to enhance productivity in warm climates, nutritional physiology as related to heat-stressed and high producing dairy cattle, macromineral nutrition and metabolism, management and nutrition of dry pregnant dairy cows, and production-economic information and analysis for optimal production and financial management and decision making.

"I'm very excited that Dr. Beede has accepted the position," said Maynard Hogberg, chairperson of the Department of Animal Science. "He brings a broad dimension of understanding to our dairy research and has a good understanding of the environmental issues involved in the dairy industry. He's a consensus builder and will integrate well with both the faculty members and industry representatives."

Beede is the author of 11 book chapters, 36 refereed scientific papers, four monographs, 63 scientific abstracts, 46 proceedings publications and 18 popular articles. He acts as a consultant in dairy herd management and nutrition in Australia, Mexico, Venezuela, South Africa, Canada, Scotland, Norway, Sweden, Spain, the Persian Gulf area and Thailand, as well as the United States.

Beede received his bachelor's degree in animal science from Colorado State University in 1973, his master's degree in ruminant nutrition from the University of Nebraska in 1975 and his doctorate in ruminant nutritional physiology and biochemistry from the University of Kentucky in 1980.

The endowed chair was created in recognition of Clinton Meadows' distinguished 23-year career at MSU. His research focused on dairy cattle management, especially improving the genetic quality of dairy cattle. The purposes of the Meadows chair are to develop new management information through research, provide the most recent management information to dairy producers through Extension publications and activities, and educate students in dairy cattle management for employment at all levels in the dairy production industry.

A key issue in the debate is whether assessments or penalties would be imposed on all producers, or only those who expand their production.

Reps. Volkmer and Steve Gunderson (R-Wis.) are the key spokesmen for the two most prominent proposals. Both include similar provisions to create Class IV programs for export, administered by an elected board. The Volkmer proposal maintains major components of the existing price support program, while capping government costs.

The Gunderson proposal modifies the price support system and mandates purchases for the food and nutrition program and the maximum, GATT-legal dairy export incentive program funding. This also limits total government costs. The Wisconsin congressman also would reduce the required budget reconciliation assessment, which goes toward the deficit, from 10 cents to 3 cents.

Dairy policy debates often are characterized more by dissension than consensus.

## Refunds to Dairy Producers Who Held Down Sales on Their Way

9

Milk producers who did not increase their 1993 milk marketings compared to their 1992 sales received refunds totaling more than \$80 million in connection with their calendar year 1993 milk marketing assessments, according to Grant Buntrock, executive vice president of the USDA's Commodity Credit Corporation.

Under Section 204 of the Agricultural Act of 1949, as amended by the Omnibus Budget Reconciliation Act of 1990, producers were required to pay an assessment on all milk they sold in 1993.

Some observers believe that budget pressure and inadequate dairy farm income could create the avenue for action.

"AFBF is supportive of dairy farmers' efforts to truly help themselves," said Richard Newpher, executive director of the American Farm Bureau Federation's Washington office. "We must be sure that any program adopted is GATT-legal, positively impacts producer income, reduces or eliminates budget reconciliation assessments and has a board elected by and made up of producers."

The assessment rate varied throughout 1993, from 11.25 cents per cwt. from Jan. 1 through April 30, to 16.35 cents per cwt. from May 1 through Oct. 31, then to 14.71 cents per cwt. from Nov. 1 through Dec. 31.

The law provides that any producer who did not increase production in the 1993 refund year, relative to the immediately preceding refund year, is eligible for a refund of the full assessment amount.

Eligible producers filed 54,403 applications for refunds worth \$80.325 million, based upon reduced milk marketings of 5.5 billion pounds, according to Buntrock. The deadline for filing for 1993 refunds was March 15.

The assessment will be increased on May-December 1994 marketings to compensate for the 1993 refunds made. That means the assessment will increase by 8.03 cents per cwt. May 1, bringing the total assessment to 19.28 cents per cwt. for the remainder of the calendar year. The rate will revert back to 11.25 cents on Jan. 1, 1995, according to the USDA announcement.



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10

## Ginseng - An Alternative Michigan Crop?

By Deb Laurell

If you're a farmer looking for an alternative Michigan crop with real market potential and high per acre gross revenue, ginseng could be for you. But as with any high return commodity, there are a number of risks associated with it.

According to Norm Remington of the Michigan Department of Agriculture (MDA), ginseng has been sought after in China for some 5,000 years, where it is highly prized for its medical purposes. American ginseng, a close relative of Oriental ginseng, is native to the deciduous forests of eastern North America, including Michigan. Dried roots of these species have been exported to China since the early 1700s. There are a number of things in print that claim ginseng will solve almost any problem you might have. "Some say that ginseng has medical benefits such as helping to reduce blood pressure and it's effective for diabetes, among a whole list of claims," said Remington.

A report prepared by Dr. John Kelly of Michigan State University's Department of Horticulture for Rep. Gary Randall, reveals ginseng contains a variety of potential active ingredients including: volatile oils, saponins, antioxi-

dants, peptides, polysaccharides, fatty acids, alcohols, and vitamins.

Remington explains that the biggest dollar market for ginseng is the oriental market place including China, Japan and Korea. However, with the current U.S. interest in natural foods, the domestic market is ever-increasing.

According to Kelly, American ginseng is a fleshy-rooted, deciduous perennial found in cool, shady forests from Wisconsin to northern Florida and Arkansas. The mature plant is approximately one foot tall with three to five compound leaves. White to greenish-white flowers are produced in midsummer followed by crimson red fruits when mature.

Ginseng is obtained from three sources: native collection, intensive woodland cultivation, or artificial shade cultivation.

Ginseng seeds are planted in the fall on four foot wide raised beds with at least 70 to 80 percent shade. Seeds are placed one inch apart in rows six inches apart and covered with a half inch of soil. A year later, roots are transplanted after the tops begin to die. A 4-5 inch layer of mulch is applied to prevent frost damage.

Ginseng prefers a light, deep, well-drained soil, with a high organic matter content and a pH of 5.5 to 6.5. Gentle slopes aid in removal of water and circulation of air.



Roots are generally harvested in four to nine years when started from seed, two to four years

when started from transplants, from mid-September through late-October. Average roots are four inches long. Market value is based on color, size and form. Roots are dried for about six weeks beginning at 60-80 degrees Fahrenheit and gradually increased to 95 degrees Fahrenheit.

Once the roots are dried, they are sold to a local buyer or shipped to a ginseng dealer. The market is somewhat limited with 95 percent being exported to the Orient. Recent market prices ranged from \$25 to \$60 per pound for field grown, \$50 to \$150 per pound for woodland cultivated, and \$160 to \$275 per pound for wild ginseng. Average yields are 2,000 pounds per acre. The most profitable alternative is to grow high quality roots on small acreage.

Although yields and returns per acre of ginseng are high, so are the cost of implementation and manpower required to grow it. Tony and Joe Lordson, Perkins, Michigan, have been planting ginseng for about nine years. Lois Lordson, Tony's wife, reports, "We are planting anywhere from two to two-and-one-half acres a year and that's about as much as we can handle both from a manpower and financial standpoint."

A definite drawback to ginseng is the difficulties included in marketing. Because wild ginseng is on the threatened species list, native collection is limited by law.

Michigan currently has five certified ginseng producers who export it to Wisconsin, the largest U.S. producer of ginseng and where 90 percent of the U.S. ginseng trade occurs.

Remington explains that it's legal to farm ginseng commercially in Michigan. Under state and federal law, ginseng raised as a crop in Michigan can be marketed legally within the state. However, federal regulations prohibit out-of-state export of Michigan ginseng unless certain requirements are met and special permission obtained from MDA. Prohibition exists because of the Convention on International Trade in Endangered Species treaty established to protect species and wildlife and plants from adverse impacts of international trade.

According to Remington, growers are allowed to export ginseng out of state if the grower agrees to a certification program conducted by MDA. This certification program includes inspection of the grower's premises and determination of the quantity of ginseng the grower will produce and market that year.

MDA does recognize that a permanent ginseng program could spur growth of the state's ginseng industry and serves as another market opportunity for Michigan's diverse agricultural industry. Remington has been a key member of a task force charged with drafting legislation that would include authority to implement a ginseng program in Michigan.

According to Dan Wyant, legislative council at MDA, passage of this legislation would allow certified producers to sell ginseng anywhere across state lines. Wyant is expecting an outcome on this legislation sometime this spring.



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# 11 New Tools Improve Sprayer Application Accuracy

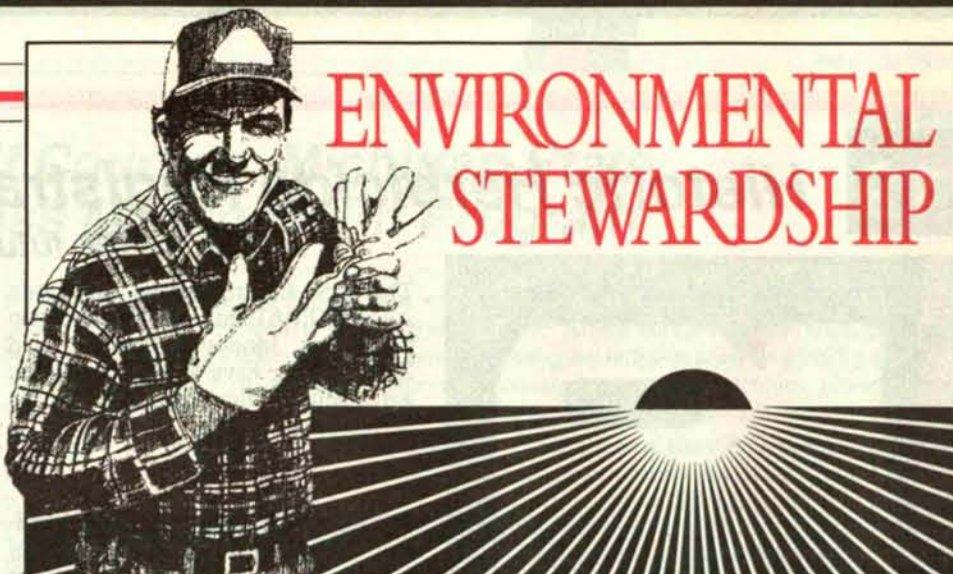


Because nozzle wear is often invisible to the naked eye, the makers of TeeJet® brand spray products introduce the TeeJet Pattern Check and Tip Tester, two easy-to-use tools to monitor spray uniformity.

The TeeJet Pattern Check helps ensure proper operation of spray equipment and a quality pattern from spray tips. By sliding the Pattern Check under a boom while spraying clean water, spray output along the boom is collected in the grooves of the portable spray table. Spray distribution is immediately apparent.

The Pattern Check makes it easy for applicators to determine if sprayers have been properly set up to produce the even distribution needed for safe, effective and cost-efficient pest control.

"Variations in nozzle placement, spray angle, overlap, boom height and tip condition can destroy spray pattern uniformity, but those problems are usually hard to spot," says Dr. Stephen Pearson, technical services manager, Spraying Systems Co. "The Pattern Check makes it easy to see if there's a problem with distribution." As



Pearson points out, identifying a problem pattern before spraying can save applicators time and money.

Applicators can ensure that flow rates from each tip on the boom match by using the TeeJet Tip Tester, a hand-held flowmeter that helps identify worn spray tips quickly and easily. By simply placing the flowmeter cap over the nozzle, applicators can read the approximate flow rate in gallons per minute directly from a scale on the face of the Tip Tester. Each tester comes with a TeeJet nozzle cleaning brush in the built-in storage compartment.

According to Pearson, "The Tip Tester and Pattern Check are inexpensive insurance. Applicators can use them each day before they spray to be sure that they are getting an even spray distribution." However, he cautions that these products should be used in addition to calibration, not in place of it.

For more information on the TeeJet Tip Tester and the TeeJet Pattern Check, write to: Spraying Systems Co., Agricultural Division, P.O. Box 7900, Wheaton, IL 60189-7900.

## Groundwater Protection Act...continued from page 1

set at three-quarters of one percent of the registrant's wholesale price.

"Your retail invoice may indicate that a portion of the prices shown go to the Groundwater and Freshwater Protection Act," said MDA's Mark Swartz. "But since this fee applies only to agricultural pesticides and because it is based on the registrant's wholesale price, it cannot legally be shown as a tax on your retail invoice, unless the fee is based solely on the wholesale price."

Unlike the pesticide registration fee, Swartz says that farmers may see groundwater protection tonnage fees being assessed on their fertilizer bill. The tonnage fee is based on the nitrogen content of the fertilizer and is equal to 1.5 cents per 1 percent of nitrogen per ton of fertilizer.

"Under this system, you would pay an extra 15 cents per ton of 10-10-10, or 69 cents per ton of 46-0-0," Swartz said. "No fee should be assessed on non-nitrogen fertilizers. Monies col-

lected by these fees will be used to address nitrate contamination of groundwater."

MDA will be working with the Soil Conservation Service and MSU Extension to provide education, technical assistance and cost-share programs for farmers wishing to voluntarily implement "Groundwater Stewardship Practices." Resources will be available through this program starting this fall, for practices such as sprayer fill areas, pesticide storage, and irrigation scheduling. Cooperative groundwater testing programs will be available for private well owners interested in their drinking water quality.

If you have any questions, feel free to contact Michigan Farm Bureau's Vicki Pontz, at (517) 323-6560, Michigan Agribusiness Association (517) 485-8580, or the Michigan Department of Agriculture at (517) 373-1087.



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### ACA on Corn

Since its introduction, ACA has demonstrated its ability to enhance plant vigor and help the plant overcome environmental stress during plant development. Seed tolerance studies have shown ACA to be completely safe to germinating corn seedlings when placed in direct contact with the corn seed in-furrow.

### Identifiable Performance Parameters on Corn

The following are frequently observed plant responses from soil applications of ACA on corn.

#### Visual Response

- Vigorous early plant growth.
- More fibrous and extensive root system
- Wider, darker green leaves (ACA-treated plants often fill the row sooner)
- Larger diameter stalk
- Taller plant (ACA-treated plants often tassel sooner)
- Heavier ear and kernel weight
- Grain dries down quicker

#### Observation Timing<sup>1</sup> (Stage of Growth)

- VE to V3
- Early-V1 to V5
- Late-10 days after silking
- V12 to V17
- V12 to maturity
- V12 to tasseling
- Maturity (Harvest)
- Maturity (Harvest)

<sup>1</sup>The staging of development described above is adapted from "How a Corn Plant Develops," Special Report No. 48, Iowa State University. V represents a leaf stage on corn where the leaf has a fully expanded leaf collar. V1 represents a corn plant with one leaf with fully expanded collar.

#### The identified performance parameters typically result in:

- Increased uptake of soil nutrients
- Increased utilization of sunlight in photosynthesis
- Improved standability and ease of harvest
- Reduced grain moisture at harvest
- Increased uptake of soil moisture
- Reduced leaf rolling during moisture stress
- Higher yields and/or test weight

#### Yield Information Field Corn (1993)

- 37 total studies
- 6.9 bushel per acre increase
- 5.8% increase in yield
- Return on ACA investment of \$12.09 (1/2 pint/acre) or \$10.37 (2/3 pint/acre)
- 1/2 pint ACA per acre in-furrow [Corn at \$2.25/bushel x 6.9 bushel increase/acre = \$15.53 - ACA investment of \$3.44/acre (1/2 pint/acre) = \$12.09 R.O.I./acre]
- 2/3 pint ACA per acre broadcast [Corn at \$2.25/bushel x 6.9 bushel increase/acre = \$15.53 - ACA investment of \$5.16/acre (2/3 pint/acre) = \$10.37 R.O.I./acre]

#### Application Techniques/Procedures

Test results have shown that ACA works best injected as a pure product in-furrow, or when the fertilizer that contains ACA is either injected or incorporated into the soil prior to, at, or soon after planting. The incorporation of movement of ACA into the soil profile can be by tillage, rainfall, or irrigation. This positions the ACA near the developing root system of the plant.

#### Methods of Application

- ACA mixes easily with and fits into the following fertilizer programs:
- Anhydrous ammonia
- Nitrogen solutions
- Mixed liquid starter fertilizers
- Dry blended broadcast or starter fertilizers
- Soil applied (weed & feed herbicide/fertilizer solutions or dry)

#### Other application methods:

- Soil applied broadcast with water as the carrier, with or without a herbicide
- Direct injection of undiluted ACA in-furrow

#### Application Rates

For in-furrow injection or banded (2" to side and 2" down), apply ACA at 5.33 to 8 fluid ounces (1/3 to 1/2 pint) per acre. Field studies of band or in-furrow applications have shown more consistent results at the 1/2 pint per acre rate. The rate for broadcast application is 10.66 fluid ounces (2/3 pint) per acre.

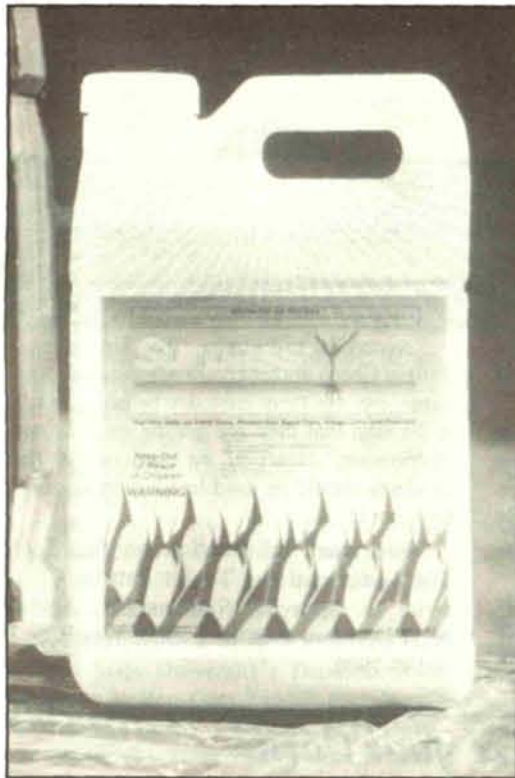
The rate of addition of ACA to anhydrous ammonia is one gallon of ACA per 3,589 lbs. anhydrous ammonia. This translates to 0.0434 fluid ounces of ACA per pound of contained nitrogen or 0.557 gallons (71.32 fluid ounces) per ton of ammonia. A typical 1,000 gallon anhydrous ammonia nurse tank filled to 85% of capacity would require 156 fluid ounces of ACA.



Contact your local Clean Crop Dealer or call 1-800-292-2701 for additional information on THE ACA ADVANTAGE

# 12 Historic Herbicide Registration Agreement

## Model for the future?



The U.S. Environmental Protection Agency (EPA) and two crop protection companies, Monsanto Company and Zeneca, Inc., have struck an historic agreement to allow registration of the herbicide acetochlor.

### Registration Conditions

The registration of the new corn herbicide is the first to carry a number of unprecedented conditions. If any of the following conditions of registration are not met, registration of acetochlor will be canceled:

- At the end of 18 months from the date of registration, the product must result in the reduction of 4 million pounds of the corn herbicides alachlor,

*The selective herbicide, used to control annual grasses and broad-leaf weeds, will be marketed under the trade name Harness (Monsanto) and Surpass EC (Zeneca).*

metachlor, atrazine, EPTC, butylate, and 2,4-D.

- At the end of three years from the date of registration, the product will result in the reduction of 22.6 million pounds of corn herbicides and 66.3 million pounds in five years. This is equal to a 33 percent reduction of such herbicides, based on 1992 levels.

- Automatic suspension of all use of acetochlor if residues of the herbicide are found in groundwater exceeding certain specified levels.

### Additional Measures

Preventative measures and monitoring programs are also built into the conditions announced by EPA. For instance, the use of the herbicide is restricted to certified applicators and by types of soil.

Aerial application of the new herbicide is prohibited. Monsanto and Zeneca will fund surface and groundwater monitoring programs in seven states (Illinois, Indiana,

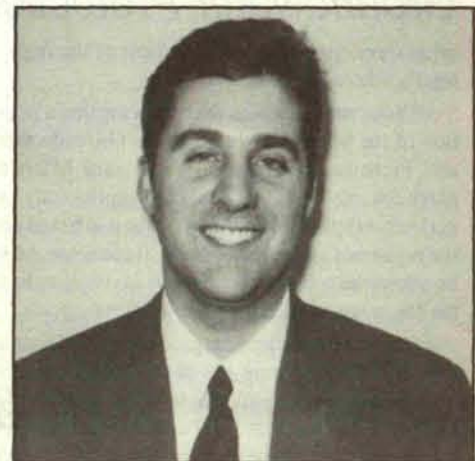
Louisiana, Kansas, Minnesota, Nebraska and Wisconsin). The monitoring programs will be conducted by an independent market research firm.

### EPA Comments

An EPA document on the registration agreement states: "Through this decision, the agency is implementing stringent standards for the registration of pesticides and industry is demonstrating its willingness to implement measures to meet environmental standards."

EPA says it will consider the restrictions placed on acetochlor in determining the eligibility of corn herbicides for reregistration of toxicologically similar active ingredients.

## Ray Ramsey Joins Michigan Live Stock Exchange



Ray Ramsey has joined the staff of the Michigan Live Stock Exchange (MLE) as the new vice president of corporate development. He will be coordinating programs between Michigan Live Stock Exchange and affiliated companies with specific emphasis on new regions and working closely with the newest members of the "521-Cooperative" throughout Indiana.

Ramsey brings an extensive background in ag marketing to MLE. He formerly worked for 13 years with Pitman-Moore where he was senior sales representative in Indiana, Illinois, Ohio and Michigan. He graduated from Purdue University in 1981 with a bachelor of science degree in agriculture economics/animal science.

## Technology Brings a Lower Fat Chip and French Fry

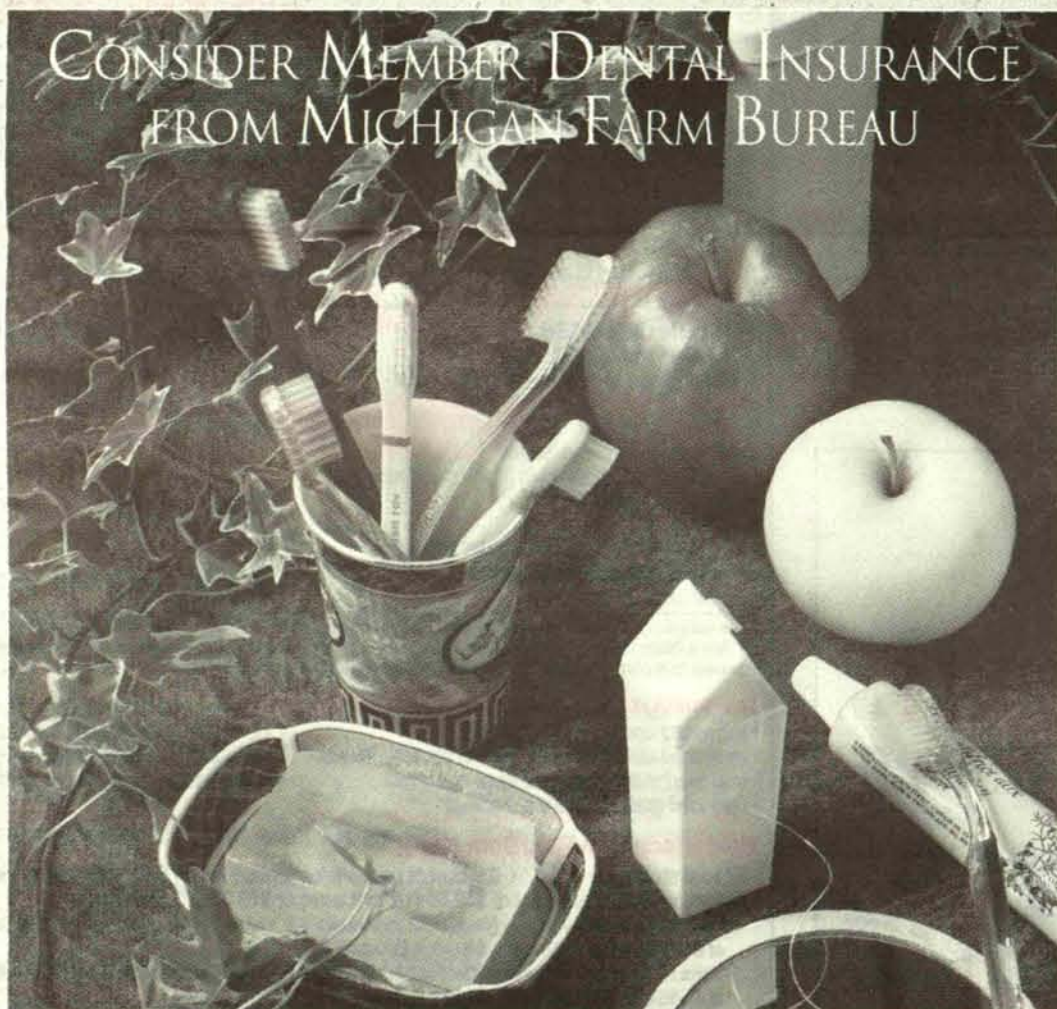
Soon you may not need an excuse to eat another french fry or potato chip, thanks to a new, starchier potato developed by Michigan Agricultural Experiment Station Scientist Jack Preiss. This new potato can be more nutritious than other potatoes and, says Preiss, "has a greater potato taste."

Preiss has used biotechnology, the process of manipulating genetic material in living organisms, to improve potatoes and other vegetables. By taking a gene used to control starch production in bacteria and inserting it into plants, Preiss has been able to increase the amount of starch stored and produced by certain plants.

Chips or fries made from the new, starchier potato will be lower in fat. Potatoes are composed mostly of starch and water, Preiss explains. When a potato chip or french fry is fried, oil displaces the water and the fat content increases. A starchier potato contains less water to be displaced by the oil. "Because it has less water, it takes up less fat. In fact, we could put on a label that says '30 percent less fat,'" Preiss says.

The new potato won't be ready for the markets as chips or fries until 1999 or 2000, after two to three years of USDA and FDA testing and approval.

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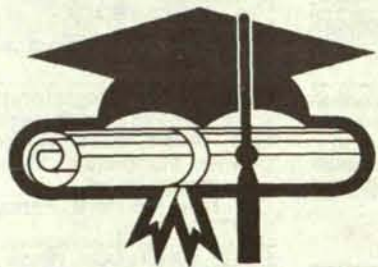
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# COLLEGE MAJORS



## Careers in Agriculture

### Major Profile: Darin Lickfeldt, Turfgrass Graduate Student

## More Than Just Golf Courses: Michigan State University's Turfgrass Management Program

By Karen Geiger

Michigan State University leads the nation in innovative uses of turfgrass. The new turf design for the World Cup Soccer Tournament playing field is the most recent development MSU's Turfgrass Management Program is noted for.

The Department of Crop and Soil Science's turfgrass program has a teaching staff that focuses on the professionalism and knowledge needed for careers in turfgrass management. Many turf graduate students consider MSU to have the best program in the country. The course of study is backed by a teaching program featuring a larger number of turfgrass experts in comparison to universities with similar programs.

The turfgrass program is broken up into three areas. The four-year program centers on the science of turf. This involves studying the physiology and maintenance of turf-grass, and the requirements of proper turf management in-

cluding fertility and weed control. The turfgrass program focuses on learning through work experience as well as class studies. This program boasts a 100 percent graduate placement record, with careers ranging from golf course supervision to research in turfgrass.

"I was well-prepared with work experience," says one turfgrass graduate student after completing his bachelor's degree.

The turfgrass management curriculum has two 18-month options. The lawn care option focuses on the landscape, mechanical and business skills involved in lawn care. This option includes on-the-job training with a paid internship, which in many cases ends in a permanent job.

The second of the two options is athletic field management. "Athletic field management is a science and an art," said David Gilstrap, coordinator of the Lawn Care and Athletic Field Management two-year programs. The two-year programs enroll a total of 98 students, and focus on the technological aspect of turf management.

"Athletic field management is the next frontier of professionalism," said Gilstrap. According to Gilstrap, there were openings for 30 positions in the turf maintenance, and only six graduates were available.

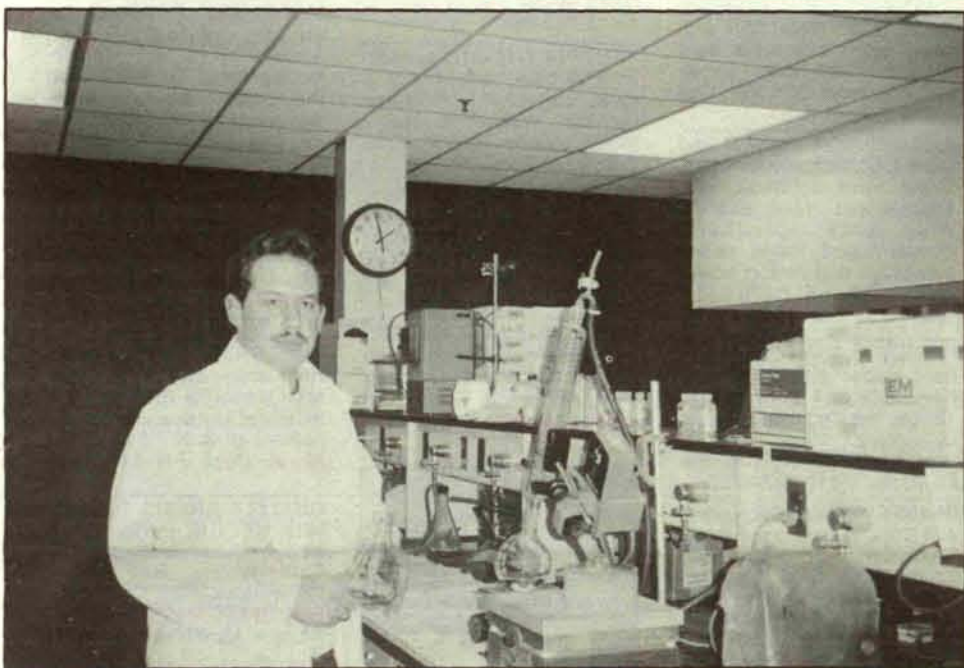
"There was one student who graduated from the program and was offered two jobs, both of which started in the mid-\$20,000 range," he noted.

The area of turfgrass is one of many affected by new regulations and standards that will require further education. The Michigan State University turfgrass program gives a greater understanding of these regulations, as well as how to incorporate them into a system.

The program also offers students a chance to join organizations within the major and the college that enhance their education. The Turfgrass Club offers a variety of social and professional experiences for students. Members take field trips to golf courses, football stadiums, equipment dealers, and other areas for on-site examination of turfgrass management practices. The Agronomy Club offers opportunities in social and professional functions, including volleyball tournaments, chances to meet members of the agri-business sector, and various opportunities to interact with students throughout the College of Agriculture and Natural Resources.

There are also several scholarships available for turfgrass students including the Mid-Michigan Turfgrass Managers' Award, and many from the turfgrass industry. With all of the opportunities in the Michigan State University turfgrass program, there is a spot for every path of interest.

For more information about the MSU Turfgrass Program, contact the Michigan State University Department of Crop and Soil Sciences at (517) 355-0271 or fill out the coupon below and mail it in.



By Karen Geiger

What goes into the earth's soil has come into focus as concern for our environment grows, and the turfgrass program at Michigan State University has provided a way for graduate student Darin Lickfeldt to look into one aspect of turfgrass management that affects the environment.

Lickfeldt is finishing his master's degree on *Pesticide Absorption by Turf*. He worked in golf course management and found an opportunity in the turf program as a technician for the turfgrass project, and will complete a master's degree simultaneously. "There is always a different challenge, always more problems to look at in research," he said.

The turfgrass program at Michigan State University boasts the best equipped staff with

some of the best field facilities, according to Lickfeldt. "I learned strong work ethics, and working hard pays off; the knowledge I've gained has been rewarding."

Opportunity in the turfgrass area is abundant. According to Lickfeldt, the turf program has 100 percent graduate placement with employment opportunities nationwide, and an excellent curriculum. "You can't limit yourself geographically. Opportunities are all over the country," he said.

Lickfeldt, who will be completing his doctorate at the University of Wisconsin, added, "Don't limit your education, seek work experience, and look into more than just the golf course management. Opportunities are vast."

## Discussion Topic for June - "What Do the Next 75 Years Hold in Store for Michigan Agriculture?"

Consulting mystic oracles, reading tea leaves, peering into a crystal ball... people have tried all these techniques (and more) to try to figure out the future. In modern times, corporations spend vast sums on consultants, think tanks and feasibility studies.

It's a tough job. Imagine you are back in 1919, pondering what the next 75 years will bring. Some trends appear obvious. The first round-trip commercial airplane flight was made this year between Paris and London. It's easy to envision that someday commercial airplanes will regularly span the globe.

Robert Goddard, an American scientist who has been experimenting with rockets, predicts that a trip to the moon by rocket may someday be possible! It seems like a bit of outlandish fantasy to think that would really happen within 75 years.

Even more inconceivable, Max Planck, a German physicist, has just won the Nobel prize for something called the "quantum theory". Who could possibly imagine that his discovery would, within 75 years, directly lead to the development of the computers that now dominate our lives?

Despite the difficulties in accurately divining the future, the effort is not a futile task. It's important to at least give some thought to what tomorrow will bring, if only to determine some rough guideposts for how we should use our resources. Predictions are a critical part of the planning process because they encourage us to set achievable targets for our organizational and business activities. If you attended one of the "Speak-Up" meetings held around the state this winter, you saw the near-term predictions that were the basis of the new Five-Year Goals recently established by the Michigan Farm Bureau Board of Directors.

So, what will agriculture look like for our children and grandchildren? The Kiplinger Agriculture Letter recently made these forecasts for agriculture in the 21st Century:

Biotechnology, especially genetic engineering, will unlock further vast improvements in agricultural productivity. That means that the industry will continue to be challenged to develop markets for its products.

Farmers will produce the same kinds of familiar foods and fibers. Since well-fed Americans change their diets slowly, a dramatic shift to exotic new foods is expected.

Beef producers will have to continue to address a consumer trend toward less beef con-

sumption, according to Kiplinger. Similarly, per capita pork consumption is not expected to change much. Beef and pork will have to be able to compete with other meats on price and convenience.

Poultry products will continue to claim a larger share of the consumer food dollar.

Aquaculture demand will rise. As natural supplies of fish and seafood products from seas, rivers and lakes decline, consumers will turn toward farmers to supply their needs.

Field crop demand will depend upon expanding export demand.

Industrial uses for crops will continue to rise. Kiplinger's predicts that some new crops with potential for the future include crambe (lubricating oil), euphorbia and meadowfoam (gasoline and industrial oil) and jojoba (high-quality liquid wax).

Whether we use fortune tellers or feasibility experts, we can only get predictions on how the future might be, not how it will be. Even if we can't divine the exact details of what tomorrow may bring, we don't have to sit back and allow the future to passively unfold before us. With proper planning and goal setting, we have the power to shape our own destinies by taking advantage of the broad trends that reveal themselves to us.

This month, give some thought and discussion to what you want the future to look like for your Community Action Group and county Farm Bureau. The CAG and county Farm Bureau members of 2069 will be grateful for your foresight.

### Discussion Questions:

1. What technology has had the most impact on farms in your community?
2. Use your imagination! What "invention" is needed to improve your farm operation today?
3. What is the most critical issue or need for Michigan farmers in the future?
4. What direction should Michigan Farm Bureau take to meet the needs of the 21st Century farmer?
5. What role will Community Action Groups have in the future and how can the CAG program improve to meet those needs?

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# 16 Smaller Pork Producers Can Still Compete

Small and mid-size hog producers could easily become discouraged about the future if they become preoccupied with evidence that their industry is moving irreversibly toward bigger and more specialized operations.

They shouldn't be too quick to throw in the towel, says Glenn Grimes, University of Missouri agricultural economist. Grimes says many of those same small businesses will be thriving into the next century if they take steps necessary to remain competitive.

Grimes, a professor emeritus in livestock marketing at the University of Missouri, recently prepared a report on the hog industry at the request of the American Farm Bureau Federation Swine Advisory Committee, which includes producer-leaders from 20 states.

Over the past 20 years, the number of hog operations in the country has dropped to less than a third of the 750,000 operators that produced hogs in 1973. Most of the hog farms today, like many other farms, still can be termed small businesses. According to the National Federation of Independent Businesses, small business is the fastest growing segment of business in urban America. But in rural America, the

number of smaller farms and ranches continues to decline.

There are economies of scale that favor larger operations, but there are also certain advantages that help smaller, efficient operations remain competitive in the market, said Grimes.

The average hog farm marketed less than 500 head in 1987, according to data from the U.S. Census Bureau. Much of the U.S. hog production is still accomplished by relatively small producers.

A University of Missouri Pork '92 survey indicated only about 23 percent of U.S. hog production was by firms marketing 10,000 head or more annually. All the small operators haven't been taken over yet.

Relatively small producers still have advantages such as flexibility, family labor, home-grown feed. Less concentrated operations also are favored from the standpoint of environmental concerns.

The cost of production per unit doesn't change much between large and small operators when the levels of management are equal. The lowest-cost one-third of producers are competitive with the best large producers.

Smaller producers can often match the buying and selling advantages of their larger competitors by working with their neighbors to take advantage of some economies of scale.

Small producers can remain competitive in the marketplace with larger producers if they are not afraid to make changes where needed and give up some independence.

Long-term, smaller producers must exhibit a willingness to change and a determination not to be excluded from technology advances and information because of size or other so-called limiting factors. If a producer doesn't have good records of production costs, establish them, says Grimes. You can't know what needs fixing if you don't know what is broken.

Some minor production techniques are just as important to keep track of as big ones, according to Grimes. For example, be sure to check feeders often to minimize waste, sort for the market to meet packer needs and control the number of open-sow days.

Small operators should take advantage of family resources and maximize use of incentives for top productive effort. Utilize best management techniques of the large producer that can

efficiently and effectively be applied to a smaller operation.

Join with neighbors in purchasing cooperatives to reduce overhead costs. Some marketing functions can be consolidated with neighbors through marketing groups, says Grimes. The group will need enough sows to be able to sell at least a trailer load of hogs each week (500 to 700 sows).

Split-sex selling may maximize returns but may double the number of sows needed. Cooperating producers will need the same genetics and feeding programs to maximize benefits.

All available markets should be tested on a regular basis. It may be wise in some areas to receive competitive bids weekly to maximize prices received.

Make use of state, federal and commercial programs of information to maintain state-of-the-art management. Most producers will need some capable consulting service for health and general management. Check for availability of such services through your university Extension Service. Or, if a group of producers are working together, each participant may be able to develop expertise in a particular area to share with the others.

Some of the points made would apply to smaller beef cattle and sheep operations as well, Grimes concluded.

## Michigan Conference on the Horse Industry, June 1-2

Michigan horse owners won't want to miss an opportunity to provide input on a number of key issues during the Michigan Conference on the Horse Industry, June 1-2 at MSU's Kellogg Center. The conference is co-sponsored by the Michigan Farm Bureau, the Michigan Horse Council, Michigan Department of Agriculture, the Michigan Veterinary Medical Association, and Michigan State University's College of Agriculture and Natural Resources, and the College of Veterinary Medicine.

According to the Michigan Horse Council's Legislative Chairperson, Dr. Barb O'Kelly, the conference will help set a course for Michigan's horse industry which, contrary to popular belief, is actually seeing a decline in numbers. She attributes that decline to a number of issues, including a growing reluctance of urban communities to accept and tolerate horses in their neighborhood.

"We have task forces that are already hard at work developing draft position papers and recommendations to be presented at the conference to address these issues," O'Kelly said. "During the conference, any member of Michigan's horse industry can provide input, and make sure that we are really meeting the future needs of the industry."

Another growing concern, said O'Kelly, is the loss of revenue from a declining racing industry, which is facing pressure from other forms of gambling. Michigan racing commissioner Nelson Westrin will be chairing a workshop during the conference on the racing and profitability issue.

Michigan Farm Bureau livestock specialist Kevin Kirk will also be chairing a workshop on education issues. Other workshop topics include: "Health and Regulation Issues" and "Community and Environmental Issues," and a dinner panel discussion chaired by Bill Ballenger, editor of *Inside Michigan Politics*, on "Horses and Life-Styles in the 21st Century."

Registration for the program is required and will cost \$55 for program material. Overnight accommodations at the Kellogg Center are additional with a rate of \$59 per night. For more details, contact MFB's Kevin Kirk at 1-800-292-2680, ext. 2024.



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